- 16. A read interface circuit comprising:
- an input buffer configured to receive data from at least one memory device;
- a data receiving memory configured to store the received data transmitted from the input buffer in accordance with a data clock signal; and
- a clean data strobe signal generating circuit configured to receive a differential data strobe signal from the at least one memory device, and generate a clean data strobe signal, the clean data strobe signal used as the data clock signal.
- 17. The read interface circuit of claim 16, wherein
- the clean data strobe signal generating circuit includes a first receiver, a second receiver, and a gate signal generator;
- the received differential data strobe signal includes a first input data strobe signal and a second input data strobe signal;
- the first receiver configured to receive the first input data strobe signal and the second input data strobe signal and output a first single ended data strobe signal;

- the second receiver configured to receive the second input data strobe signal and a reference voltage signal and output a second single ended data strobe signal;
- the gate signal generator configured to receive the first and second single ended data strobe signals and generate a data strobe gate signal based on the received first and second single ended data strobe signals; and
- the clean data strobe signal is further configured to generate the clean data strobe signal based on the data strobe gate signal and the first single ended data strobe signal.
- **18**. The read interface circuit of claim **16**, wherein the at least one memory device is a volatile semiconductor device.
- 19. The read interface circuit of claim 16, wherein the at least one memory device is a non-volatile semiconductor memory device.
- 20. The read interface circuit of claim 16, wherein the data receiving memory is further configured to output the stored read data to a memory controller.

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